UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,799	11/24/2003	Christopher J. Hanna	901120.90011	5435

26710   7590   12/09/2008
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ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
12/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _06 June 2008_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-32_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-32_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1.   The amendment filed on 6/6/08 is entered and made of record.

2.   The examiner had considered the documents (rule 130, 131, 132 Affidavits)

submitted by the applicant.

3.   Response to Applicant's Arguments:

On page 12, the applicant stated:

There is no teaching or suggestion made by either Morris or Fuchs that is directed to "a

business rules processor coupled to the means for receiving to process metadata in a

received message to determine in accordance with stored rules which one of the

plurality of storage devices should store the associated image data" (emphasis added).

Instead, Morris is limited to teaching that an image is necessarily created at a given,

high resolution (cf. Morris; col. 3, line 65-co1.4, line 7; col. 9, lines 20-22. Also, cf.

O'Connor, paragraphs 14 and 16). Subsequently, that image is compressed into a lower

resolution copy for reduced storage size and both a high resolution and low resolution

image are stored in respective storage devices (cf..Morris; col. 4, lines 19-30; col. 4,

lines 40-56). There is no business rules processor or equivalent system to intelligently

manage the flow of data, nor is there any evaluation made in accordance with a set of

stored rules to manage the transfer of data. Instead, every image that has a low

resolution is sent to one storage device, and every image that has high resolution is

sent to a different storage device.

The examiner disagrees; Morris disclosure of storing low resolution and high resolution images in different storage devices reads on being one of the storage rules and an additional function of Morris. The examiner pointed out to column 16, lines 27 to 38 and figure 12A, element 19, where it discloses concept of a set of image storing rules and a computing device which contains a processor. The record, referring to image data scanned (figure 6, element 22), is stored in accordance to object type, copy type, resolution and "txpp" digits of the record's object name. Each of those storing type is read as the plurality of storage rules because the object type storing rule include the type of object present in the image, or the resolution storing rule might includes storing image according to the resolution in the image shown in figure 6, elements 50 and 60, which still reads on "a *business rules processor* coupled to the means for receiving to process metadata in a received message to determine in accordance with stored rules which one of the plurality of storage devices should store the associated image data," where "txpp" digits are read as the metadata. In addition, the date of the image is also read as the metadata; as discussed on column 16, lines 16-26, if image is stored over 30 days, the image is transferred to another storage device, being the optical drive. Changing the name to "*business processor*" does not change the functionality of the limitations. The examiner suggests further amending the meaning of the "*business processor.*"

With regards to the arguments to claims 7 and 17, the 'parameters' shown in Morris are the date of the image being stored discussed on page

With regards to the arguments for claim 19, 30 and 31, Jamroga suggests manipulating

the software by changing its program code, which suggests storage can be modified.

With regards to arguments of claim 20, the examiner does not see "JAVA" being cited in

claim 20.

The examiner will repeat the same rejections.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1, 2, 13 – 16, 20 – 25, 29 and 32 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Fuch ('475) in view of Morris ('185).

With regards to claim 1, Fuchs discloses an image management system connected to

receive messages from a plurality of image producing devices coupled to a network, the

image management system comprising

a plurality of storage devices, each storage device having cost and operating

characteristics which differ from the other storage devices (see figure column 1 lines 57

to 59, the storage devices listed operates differently from one another and each have its

own price tag, also see figure 2, each jukeboxes 22 to 25 maybe different depending on

where / when the jukeboxes are install);

means for receiving over the network from image producing devices which

contain image data (see figure 2, the images received at each file server are distributed

from a server of distributors, 15 and 16),

a buffer for storing image data in a received coupled to the means for receiving

(see figure 2, element 18, the file server are where the images are stored temporary

until it is decided on where the image data will be store); and

storing said image data to one of plurality of storage device based on whether or

not a storage medium is full (see column 1 lines 43 to 45).

Fuch suggest having a self-controlled, distributed storing to avoid overloading individual

memory system (see column 1, lines 42 to 45) and as a result data maybe reroute

automatically to other memory systems so that no data is jam (see column 1, lines 47 to

50). The self-controlled ability is inherently some rule, condition or program which

detects the available capacity each storage medium and store data in corresponding

storage medium if there is enough memory in the corresponding storage medium.

However, Fuch does not explicitly discuss this program and does not disclose the

concept of rules processor. However, Morris discloses such features. Morris discloses

concept of rules processor (see column 16, lines 27 to 38). The record, referring to

image data scanned (figure 6, element 22), is stored in accordance to object type, copy

type, resolution and "txpp" digits of the record's object name. Each of those storing type

is read as the plurality of storage rules because for example, the object type storing rule

include the type of object present in the image, or the resolution storing rule might

includes storing image according to the resolution in the image shown in figure 6,

elements 50 and 60. In addition, Morris also store records in accordance to data of the

record (suggested from column 16, lines 16 to 26), wherein this data of the record is

read as metadata.

One skill in the art would include steps of archiving document image using designated

file identifier or metadata because to allow users to use assigned identifier to retrieve

the desired image documents, which save searching time, which is a well known

motivation in image retrieval (MPEP 2144.03).

With regards to claim 2, an extension from the rejection from claim 1, Morris discloses

storing the metadata in database (see column 16, lines 16 to 26).

With regards to claim 13, Fuchs discloses relocating image data based on patient data

(see figure 1, the different imaging systems captures images of the patient), a patient

study (the images taken by the imaging systems will be study to look for disease such

as cancer), patient body part (parts or all of the body parts are recorded according to

the type of disease) and modality (the modality are the different types of imaging

systems), but does not disclose metadata being a series, modality and procedure type.

However, metadata are those which identifies the information and features of its medical images, so it is obvious to include metadata including a series and procedure type, which information well known in the medical area. One skill in the art would include procedure type as metadata because to allow doctors to search for images based on the types of disease being search using imaging systems, so the doctors will be able to find proper images to perform procedures on the images retrieved.

With regards to claims 16, 21, 24, 25, 29 and 32, see the rationale and rejection for claim 1.

With regards to claims 14, 15, 22 and 23, Fuchs discloses all the limitations discussed in claim 2, but does not disclose the date / time and identities of requesting users who are trying to access information data. However, it is well known in the art of image retrieval to record the time and identities of users who are trying to access database information (MPEP 2144.03). One skill in the art would include the time and identities of users who try to access database information because to keep track of people who may force access on the information in the database, to increase security of the storage system.

With regards to claim 20, Morris discloses a persistent messaging service coupled to the processor means and being operable to store said message to be acted upon at a

later time and means for acting on the stored message at said later time to transfer said

image data to said another one of said storage device (see column 20, lines 42 to 50).

3.   Claims 3 – 12, 17 – 19, 26 – 28, 30 and 31 are rejected over U.S.C. 103(a) as

unpatentable over Fuchs ('475) in view of Morris ('185) as applied to claim 1 further in

view of Jamroga et al. (US pat no 6,574,742).

With regards to claim 3, Fuchs discloses all the features and elements discussed in

claim 1, but do not disclose determining whether images received from the network are

authorized images. Jamroga et al. discloses enterprise authority manager coupled to

the means for receiving, the enterprise authority manager storing information on each

image producing device authorized to store images in the image management system,

and being operable to determine if the a image received over the network is from an

authorized image producing device (see column 13, lines 3 to 12, at the warehouse

level, the system check the integrity of the images received from the central database,

details shown in figure 5, element 37). One skill in the art would include steps of

authenticating image data received from a network because to prevent defective or

harmful programs attached with images received from entering the management

system, improving security of stored images already stored in database.

With regards to claim 4, an extension to the arguments from rejection of claim 3,

Jamroga et al. discloses an enterprise authority manager stores information indicative of

the data type appropriate for an authorized image producing device (see figure 1 –

those images taken from the central database are images taken from authorized image

producing device).

With regards to claim 5, an extension to the arguments from rejection of claim 4,

Jamroga et al. discloses means for receiving also includes means for receiving

messages over the network from users requesting access to stored images and

associated stored metadata, and in which the enterprise authority manager stores

information indicative of authorized users (see figure 1, the enterprise managers are

those which controls the central database and the authorized users are the participant

from the medical institutions connected to the central database).

With regards to claim 6, an extension to the arguments from rejection of claim 5,

Jamroga et al. discloses the enterprise authority manager is operable to deny access to

unauthorized users (see figure 1, the unauthorized users are those that are not included

in the participant institution).

With regards to claim 7, Fuchs discloses all the limitations discussed in claim 1, but

does not disclose storing *plurality of rules* which identifies different actions to be

performed and storing medical images into different storage devices according to the

type of medical images. Fuchs does teach plurality of rules, which stores medical

images according to the amount of storage space available in the storage device (see

figure 2, the file server stores medical images into jukeboxes according to amount of storage space, column 1 lines 43 to 46) and Fuchs also discloses relocating image data based on patient data. Jamroga discloses a plurality of storage rules of medical images (see column 13 lines 51 to 57). Fuchs' method of initial storage means according to amount of storage space available modified by methods relocating image data based on patient data and having plurality of rules implemented by system software disclose the claimed invention of claim 7. One skill in the art would include plurality of storage rules because to store images in the proper location, so the stored images are retrieved quickly, to save time.

With regards to claim 8, Fuchs discloses plurality of medical imaging systems such as CT unit, MR unit DSA unit and X-ray unit, which are all used for imaging purposes and the captured images are transmitted in to communication network and stored in image memory system. Each imaging systems take images of the patient, including image data of patient, combined with methods of storing means according to patient data with plurality of rules implemented by system software disclosed by Jamroga disclose the claimed invention of claim 8.

With regards to claim 9, an extension to the arguments to claim 7, Jamroga discloses plurality of participating institutions to access or store medical images. Fuchs and Jamroga disclose the claimed invention of claim 9.

With regards to claim 10, Fuchs and Jamroga disclose a image management system as recited in claim 7, in which the image producing devices include medical imaging systems and one of said parameters is the imaging modality (see figure 1 of Fuchs – shows the plurality of medical imaging systems and Jamroga discloses having plurality of storage rules to store medical image data).

With regards to claims 11 and 12, Fuchs discloses a management system as recited in claim 10, in which one of said parameters is the subject of the image (the images taken are images of patients).

With regards to claim 17, see the rationale and rejection for claim 7.

With regards to claim 18, see the rationale and rejection for claim 11.

With regards to claim 19, Fuchs discloses all the limitations discussed in claim 17, but does not disclose editing storage rules; Jamroga discusses storage rules are implemented by using system software. It is well known in the art to modify system software based on the user's liking and convenience. One skill in the art would include having the user change storage rules because the central database may add more storage devices and it is necessary to change storage rules to store incoming images from participant institutions to store these new images into the new storage devices, to avoid overloading the older storage devices.

With regards to claim 26, see the rationale and rejection for claim 8.

With regards to claim 27, see the rationale and rejection for claim 9.

With regards to claim 28, see the rationale and rejection for claim 11.

With regards to claims 30 and 31, see the rationale and rejection for claim 19.

Conclusion

This action is made final. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shorten statutory period for reply to this final action is set to expire three months from the mailing date of this action. In the event a first reply is filed within two months of the mailing date of this final action and the advisory action is not mailed until after the end of the three-month shorten statutory period, then the shorten statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however will the statutory period for reply expire later than six months from the mailing date of the final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623 or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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